

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior listings and versions of claims in the application:

1-108 (canceled)

109. (previously presented) A kit, comprising:

- a) a cleavage means; and
- b) a first oligonucleotide comprising a duplex region adjacent to a single-stranded 3' arm.

110. (previously presented) The kit of Claim 109, wherein said first oligonucleotide comprises a fluorophore having quenched emission.

111. (previously presented) The kit of Claim 109, wherein said cleavage means comprises an enzyme.

112. (previously presented) The kit of Claim 111, wherein said enzyme comprises a DNA polymerase.

113. (previously presented) The kit of Claim 112 wherein said DNA polymerase comprises a thermostable DNA polymerase.

114. (previously presented) The kit of Claim 113, wherein said thermostable DNA polymerase is derived from an organism from genus *Thermus*.

115. (previously presented) The kit of Claim 111, wherein said enzyme comprises a 5' nuclease.

116. (previously presented) The kit of Claim 111, wherein said enzyme comprises a thermostable 5' nuclease derived from a thermostable DNA polymerase modified to have reduced synthetic activity.

117. (previously presented) The kit of Claim 109, wherein said first oligonucleotide is less than 100 nucleotides long.

118. (previously presented) The kit of Claim 109, wherein said first oligonucleotide is less than 50 nucleotides long.

119. (previously presented) The kit of Claim 109, further comprising a second oligonucleotide.

120. (previously presented) The kit of Claim 119, wherein said second oligonucleotide comprises a region complementary to said single-stranded 3' arm of said first oligonucleotide.

121. (previously presented) The kit of Claim 119, further comprising a first nucleic acid molecule containing a portion complementary to at least a portion of said second oligonucleotide.

122. (previously presented) The kit of Claim 121, further comprising a third oligonucleotide.

123. (previously presented) The kit of Claim 122, wherein said third oligonucleotide contains a portion complementary to at least a portion of said first nucleic acid molecule.